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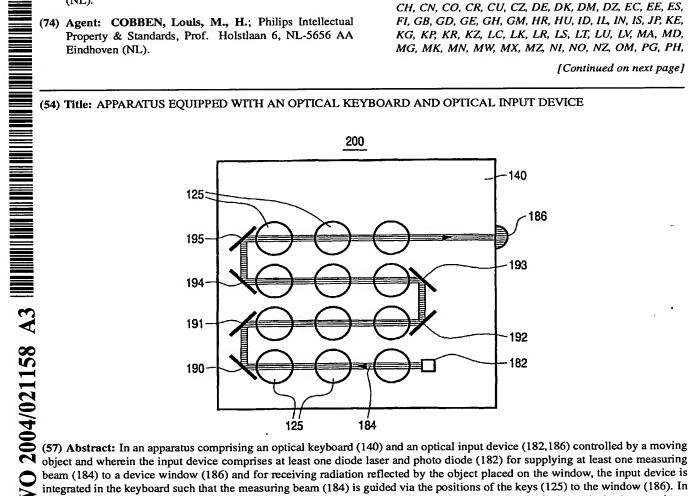
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beam (184) to a device window (186) and for receiving radiation reflected by the object placed on the window, the input device is integrated in the keyboard such that the measuring beam (184) is guided via the positions of the keys (125) to the window (186). In this way the optical the keyboard is substantially simplified and the reliability of the output signal of the input device increased.



PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F3/02 H03K17/969 G06F1/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - G06F - H03K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB, COMPENDEX

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C DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the	relevant passages	Relevant to claim No.
E	DUIJVE RENE (NL); KONINKL PHILI ELECTRONICS) 27 November 2003 (03/098527 A (VERWEG FRANSISCUS G C; 1,4, JVE RENE (NL); KONINKL PHILIPS 7-10, CTRONICS) 27 November 2003 (2003-11-27) 13-18 e 28, paragraph 2; claims; figures	
Α	PATENT ABSTRACTS OF JAPAN vol. 0143, no. 40 (P-1080), 23 July 1990 (1990-07-23) & JP 2 116912 A (NEC CORP), 1 May 1990 (1990-05-01) abstract		1-3
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 01, 28 February 1995 (1995-02-28) & JP 6 289967 A (NAOHIRO TANNO; 01), 18 October 1994 (1994-10-1 abstract	others: 8) -/	1-3
X Furt	her documents are listed in the continuation of box C.	X Patent family members are listed	in annex.
"A" docum consid "E" earlier filing o "L" docum which clatio "O" docum other	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention liber document but published on or after the international right date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention and date of understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone cannot be considered to invention cannot be considered to inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "S" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.		the application but every underlying the claimed invention to considered to cournent is taken alone claimed invention eventive step when the one other such docurus to a person skilled
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswljk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Durand, J	

INTERNATIONAL SEARCH REPORT

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C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/37410 A (KONINKL PHILIPS ELECTRONICS NV) 10 May 2002 (2002-05-10) the whole document	1,4-18

INTERNATIONAL SEARCH REPORT

Inte 121 Application No
PCT/IB 03/03571

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 03098527	Α	27-11-2003	WO	03098527 A2	27-11-2003
JP 2116912	Α	01-05-1990	NONE		
JP 6289967	Ā	18-10-1994	JP JP	2025637 C 7060360 B	26-02-1996 28-06-1995
WO 0237410	A	10-05-2002	CN CN CN WO WO EP EP US US	1408064 T 1411587 T 1416554 T 0237124 A1 0237410 A1 0237411 A1 1261877 A1 1334463 A1 1334464 A1 2003016365 A1 2003006367 A1 2002104957 A1	02-04-2003 16-04-2003 07-05-2003 10-05-2002 10-05-2002 10-05-2002 04-12-2003 13-08-2003 13-08-2003 23-01-2003 09-01-2003